

M 5.9, 53 km WSW of Sado, Japan

Origin Time: 2024-01-09 08:59:10 UTC (Tue 17:59:10 local)
Location: 37.8728° N 137.7809° E Depth: 10.0 km

PAGER Version 5

Created: 4 weeks, 1 day after earthquake

Estimated Fatalities

Green alert for shaking-related fatalities and economic losses. There is a low likelihood of casualties and damage.

Shaking Intensity	Estimated Fatalities
1-10	65%
10-100	30%
100-100,000	4%

Estimated Economic Losses

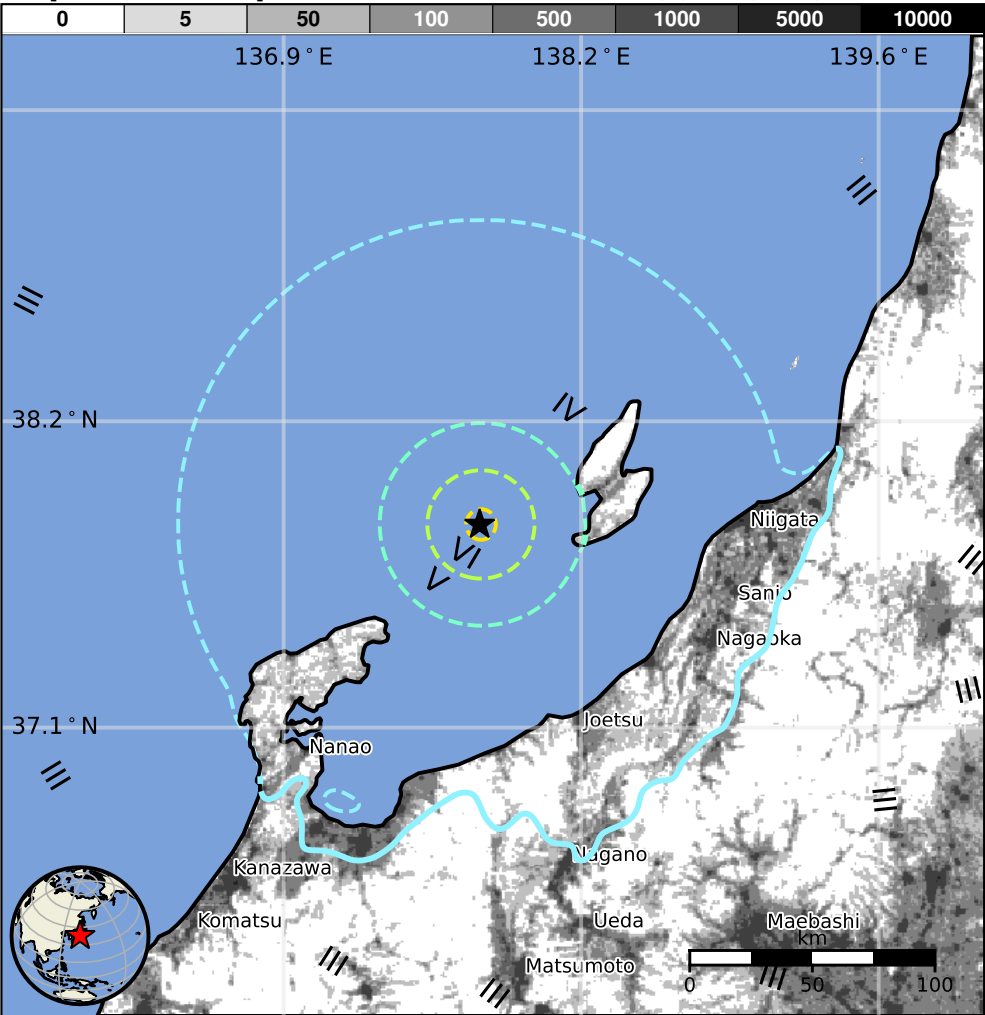
Shaking Intensity	Estimated Economic Losses (USD Millions)
1-10	65%
10-100	30%
100-100,000	4%

Estimated Population Exposed to Earthquake Shaking

ESTIMATED POPULATION EXPOSURE (k=x1000)		—*	9,127k*	4,012k	18k	0	0	0	0	0
ESTIMATED MODIFIED MERCALLI INTENSITY		I	II-III	IV	V	VI	VII	VIII	IX	X+
PERCEIVED SHAKING		Not felt	Weak	Light	Moderate	Strong	Very Strong	Severe	Violent	Extreme
POTENTIAL DAMAGE	Resistant Structures	None	None	None	V. Light	Light	Moderate	Mod./Heavy	Heavy	V. Heavy
	Vulnerable Structures	None	None	None	Light	Moderate	Mod./Heavy	Heavy	V. Heavy	V. Heavy

*Estimated exposure only includes population within the map area.

Population Exposure



Structures

Overall, the population in this region resides in structures that are resistant to earthquake shaking, though vulnerable structures exist. The predominant vulnerable building types are heavy wood frame and reinforced/confined masonry construction.

Historical Earthquakes

Date (UTC)	Dist. (km)	Mag.	Max MMI(#)	Shaking Deaths
1983-03-15	342	5.4	VII(259k)	1
1983-08-08	286	5.6	VII(7k)	1
1983-05-26	310	7.7	VII(174k)	104

Recent earthquakes in this area have caused secondary hazards such as landslides and fires that might have contributed to losses.

Selected City Exposure

MMI	City	Population
IV	Ryotsu-minato	16k
IV	Kashiwazaki	86k
IV	Maki	29k
IV	Yoshida-kasugacho	26k
IV	Niigata	505k
IV	Shirone	41k
IV	Toyama	326k
IV	Kanazawa	459k
III	Nagano	360k
III	Maebashi	283k
III	Utsunomiya	450k